

WHAT IS CLAIMED IS:

- 1 1. A liquid ejection head, comprising:
 - 2 a plurality of liquid ejection units, each comprising:
 - 3 a casing body, having a first pair of faces extending in a first
 - 4 direction, and a second pair of faces connecting the first pair of faces and
 - 5 extending obliquely relative to the first direction; and
 - 6 a plurality of nozzles, from which liquid droplets are ejected, the
 - 7 nozzles arranged in the first direction to form a first nozzle array and a second
 - 8 nozzle array, wherein:
 - 9 the liquid ejection units are arranged such that one of the second pair
 - 10 of faces in one of the liquid ejection units and one of the second pair of faces
 - 11 in another one of the liquid ejection units are confronted with each other, so
 - 12 that the liquid ejection units are overlapped in both of the first direction and a
 - 13 second direction which is perpendicular to the first direction;
 - 14 the first nozzle array in one of the liquid ejection units and the first
 - 15 nozzle array in another one of the liquid ejection units constitute a first nozzle
 - 16 group, which is continuous as viewed from the second direction, for ejecting a
 - 17 first kind of liquid; and
 - 18 the second nozzle array in one of the liquid ejection units and the
 - 19 second nozzle array in another one of the liquid ejection units constitute a
 - 20 second nozzle group, which is continuous as viewed from the second direction,
 - 21 for ejecting a second kind of liquid.

1 2. The liquid ejection head as set forth in claim 1, wherein:
2 the casing body is formed with a chamber for accommodating a
3 plurality of vibrator units which extends in a third direction which is orthogonal
4 to the first direction and the second direction;
5 each of the vibrator units comprises:
6 a fixation board, fixed on an inner face of the chamber; and
7 a plurality of piezoelectric vibrators, arranged on the fixation board
8 in the first direction to cause pressure fluctuation in liquid contained in pressure
9 generation chambers which are respectively communicated with the nozzles in
10 one of the first nozzle array and the second nozzle array; and
11 the second pair of faces extend in the third direction.

1 3. The liquid ejection head as set forth in claim 2, wherein the second
2 pair of faces are parallel to each other as viewed from the third direction.

1 4. The liquid ejection head as set forth in claim 2, wherein a dimension
2 of the fixation board in the first direction is greater than a length of each of the
3 first nozzle array and the second nozzle array.

1 5. The liquid ejection head as set forth in claim 1, wherein lengths of the
2 first nozzle array and the second nozzle are identical with each other.

1 6. The liquid ejection head as set forth in claim 1, wherein the first kind
2 of liquid and the second kind of liquid are identical with each other.

1 7. The liquid ejection head as set forth in claim 1, wherein the first kind
2 of liquid and the second kind of liquid are different from each other.

1 8. The liquid ejection head as set forth in claim 1, wherein:
2 each of the liquid ejection units comprises a first liquid reservoir
3 communicated with the nozzles in the first nozzle array, and a second liquid
4 reservoir communicated with the nozzles in the second nozzle array; and
5 the first nozzle array and the second nozzle array are arranged
6 between the first liquid reservoir and the second liquid reservoir, as viewed
7 from a third direction which is orthogonal to the first direction and the second
8 direction.

1 9. The liquid ejection head as set forth in claim 1, wherein:
2 the nozzles are arranged with a constant interval; and
3 the first nozzle array and the second nozzle array are shifted relative
4 to each other in the first direction by a half of the constant interval.

1 10. The liquid ejection head as set forth in claim 1, further comprising a
2 holder, formed with a positioning member which determines positions of the
3 liquid ejection units.